

NOTICE OF THE NAMING AND RELEASE OF 'KONZA'
AROMATIC SUMAC FOR USE IN RESOURCE CONSERVATION PLANTINGS

T4404

The USDA-Soil Conservation Service, the Nebraska Game and Parks Commission, the Kansas Fish and Game Commission, and the Agricultural Experiment Stations of Nebraska and Kansas announce the naming and release of 'Konza' aromatic sumac (Rhus arornatica var. serotina (Greene) Rehd.), for commercial production and sale of seed and plants.

Origin: The original seed was collected in 1958 from several plants growing on a limestone-breaks site one mile south of Manhattan, Kansas, in Riley County. Plants were initially evaluated at the Manhattan, Kansas, Plant Materials Center. This variety was tested as PMK-32. Plants for field testing have been produced from seed.

Description: 'Konza' aromatic sumac is a deciduous, native, perennial shrub which grows to a height of 10 feet (3 meters). Height and growth form will vary according to soils and geographic location. The plant is usually wider than its height. Leaves are compound, alternate; 3 leaflets. Each center leaflet is about 2 inches (5 cm) long and 1 inch (2.5 cm) wide, side leaflets smaller. Flowers appear in March to April. Stamens and pistils usually in the same flower or on separate plants. Fruits form in late July in dense globular clusters 1.5 inches (3-4 cm) in diameter. Each fruit is red, densely hairy. Seeds are light red-brown, oval or bean-shaped, and smooth.

This is a widespread and highly variable variety. From the abundant literature available, it is apparent that there is a large and diverse interbreeding gene-pool providing much superficial morphological variation. The description following and the voucher specimen identification were provided by Dr. T. M. Barkley, Curator of the Herbarium and Taxonomist, Kansas Agricultural Experiment Station, Kansas State University, Manhattan, Kansas.

"The chief distinguishing feature between Rhus arornatica and R. trilobata is the rather tenuous point of the former producing flowers before or at the onset of leaf-production, while the latter begins flowering after the leaves have started to grow. And the intermediate condition is found in R. aromatica var. serotina with which we are concerned. The plants form a cline from the eastern part of the country across to the region of the Rocky Mountains, with the eastern materials referable to R. aromatica var. aromatica, the central prairies materials are R. arornatica var. serotina, and the far western materials (high plains, Rocky Mountains, etc.) are R. aromatica var. trilobata. This distinction is not absolute however. Some populations, particularly in the southern plains, have different pubescent patterns and are recognized as var. flabelliformis and var. pilosissima."

Method of Development: Direct increase of field collection after comparison with 20 other accessions representing native collections from Wyoming, Nebraska, Missouri, Kansas, and Oklahoma. It was also evaluated with commercial sources of aromatic sumac. Sixty-four field plantings have been made in Nebraska since 1970, 24 in Kansas, and 5 in Oklahoma.

Area of Adaptation: This cultivar grows on a wide variety of soils and is adapted in Kansas, Nebraska, western Iowa, and northwest Missouri. 'Bighorn' skunkbush sumac (*Rhus trilobata* Nutt.) is recommended for planting in New Mexico, Colorado, Wyoming, Montana, and North and South Dakota.

Diseases or Insect Problems: Of all accessions checked in field plantings and on the Manhattan, Kansas, Plant Materials Center, PMK-32 had the least amount of leaf rust and insect damage to the foliage.

Uses: This cultivar is suitable for use in many types of conservation plantings. Since it is a native species, it requires little maintenance and tolerates prolonged dry periods. It is useful for windbreaks, cover on critical areas subject to erosion, and for screening unsightly areas or for noise barriers. 'Konza' provides good quality cover and some food for a variety of birds and mammals. Although this cultivar was not selected for landscaping purposes, it does have potential for use in highway rest stop areas, as a snow entrapment plant, and in recreational areas. As is true with most sumac species, the leaves and fruit are attractive during the fall period.

Propagation: 'Konza' is a seed propagated cultivar. Plants do not generally produce seed until they are 3-4 years old.

Seed is cleaned by using a special washing technique, then drying or by hammermilling then running it through an air-screen cleaner.

The cleaned seed needs to be soaked for approximately 20 minutes in concentrated sulfuric acid, then washed to scarify the seed coats. Processed seed is planted in mid-May in moist soils. Good stands of seedlings can be expected in early June.

Source of Seed and Plants: Breeder seed will be maintained by the Manhattan, Kansas, Plant Materials Center. Foundation seed will be maintained by the Nebraska and Kansas Agricultural Experiment Stations. Limited numbers of live plants will be available from the Manhattan, Kansas, Plant Materials Center for the establishment of seed source nurseries. Seed will be on hand for the initial production of plants.

Recommendation of New Cultivar of Rhus aromatica serotina
Aromatic sumac To Be Certified For Release

It is recommended that the aromatic sumac selection PMK-32, selected by the Soil Conservation Service in cooperation with the Kansas Agricultural Experiment Station and Kansas Fish and Game Commission, be released as a cultivar under the vernacular name "Konza." This cultivar is the result of the field selection as described in the attached proposal.

Recommended:

3-3-80
Date

Keith Lynch
Member, Tree Improvement Committee

3/3/80
Date

[Signature]
Member, Tree Improvement Committee

3/5/80
Date

[Signature]
Member, Tree Improvement Committee

Concurrence:

3/5/80
Date

[Signature]
State and Extension Forester

Approved:

3/12/80
Date

Lloyd W. Smith
Director, Agricultural Experiment Station

4/1/80
Date

[Signature]
Director, Kansas Fish and Game Commission

5/1/80
Date

[Signature]
USDA-SCS-Washington, D. C.